

**BOARD AND MANUFACTURE THEREOF**

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Abstract of JP11135906

PROBLEM TO BE SOLVED: To provide an aluminum nitride board composed of a conductive layer and an aluminum nitride sintered body which is high enough in adhesive strength to the conductive layer, wherein the conductive layer is high in thermal conductivity and forms a via, no crack is present in the aluminum nitride sintered body, and the via is kept free from fissures. **SOLUTION:** An aluminum nitride board is above 190 W/mK in thermal conductivity and composed of a conductive layer that forms a via formed of high-melting metal such as tungsten or the like, aluminum nitride and a aluminum nitride sintered body which is 5.0 kg/mm² or above in adhesive strength to the conductive layer. The aluminum nitride sintered body is formed through a manner where a through-hole is provided to an aluminum nitride molded body formed of aluminum nitride powder, sintering auxiliary, and organic binder, conductive paste composed of 100 parts by weight of high-melting metal powder and 2 to 10 parts by weight of aluminum nitride is filled into the above through- hole, and the aluminum nitride molded body is degreased so as to make a residual carbon rate range from 800 to 3000 ppm, burned at temperatures of 1200 to 1700 deg.C, and then burned again at temperature of 1800 to 1950 deg.C into the aluminum nitride sintered board.

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